

CPS Courses To Be Offered

Special courses in preparation for the Certified Professional Secretary Examination will be offered in Oak Ridge, beginning this month. Office Administration 4430 (Secretarial Procedures) and CPS Accounting will be given in the Fall Quarter. Registration for this semester for the Adult Education classes (CPS Accounting) is now in progress and will be until September 20. Classes begin September 23. Registration for the U.T. Evening School is September 16, 17. The Office Administration course is under the aegis of the U.T. Evening School.

Winter courses will include CPS Advanced Shorthand; and Office Administration 1110 (Business Administration). In the Spring Quarter the Adult Education Program will offer CPS Skills Review . . . and the U.T. Evening School will offer Business Law 4110.

All classes are held at the Oak Ridge High School, and are approved for reimbursement under the Carbide Educational Assistance Program.

Additional information concerning these National Secretaries Association sponsored courses may be obtained from Mabel Tyer, extension 3-7121.

Welding Society Meeting Tuesday

The Northeast Tennessee section of the American Welding Society opens its new year with a meeting next Tuesday, September 17. The dinner meet is set at the Alexander Motor Inn, Oak Ridge . . . with pre-heat scheduled at 6:30 p.m., dinner at 7:15 and the speaker at 8 p.m.

Leon N. Tezrick, chief welding engineer of the Airco Welding Products Division, Air Reduction Company, will speak on "Welding Metallurgy of Low Alloy Steel." The speaker is a graduate of Rensselaer Polytechnic Institute and has been in the welding profession for about 25 years.

All interested personnel are invited to Tuesday's meeting.

LRL's Bowman Guest At Physics Seminar

C. D. Bowman, Lawrence Radiation Laboratory, Livermore, will be guest lecturer at this week's Physics Division seminar. His subject is "Electromagnetic Transition in $Pb^{206,207,208}$ from Threshold Photoneutron Cross Section Measurements."

The seminar is set for Friday, September 13, at 3:15 p.m. in the East Auditorium of ORNL's 4500 building.

O. W. Patrick, Herb Reynolds Promoted To Stores Foremen Effective September 1

The Materials and Services Division announces the promotion of two employees, Oscar W. Patrick Sr. and Herbert Reynolds. Both men are promoted to Stores Foremen, effective September 1.

Patrick, born in Oneida, Tennessee, came to Y-12 May 24, 1948. He served in the U.S. Army from 1942 until 1945. Prior to his military service he worked with the Diamond Coal Mining Company, and returned there after the war ended. He worked as a clerk. Briefly he was with the Vermont Gateway Service Station and as a mail clerk at the Brushy Mountain Prison.

Mrs. Patrick is the former Lucy Alice Duncan. The couple lives at Petros, Tennessee. They have a son, Oscar Jr., in the Army, stationed at Fort Knox, Kentucky; and Billy, who recently hired into Y-12, and two daughters, Alice and Wanda.

The new foreman likes to diddle around home, and is interested in all kinds of ball games. He fishes and hunts also when time allows.

Herb Reynolds, born in Clinton, grew up in area now covered by Norris Lake. He graduated from Norris High School, and has done University of Tennessee work. He served in the U.S. Navy from 1947 until 1950 aboard the U.S.S. Mt. McKinley. He worked with the Atomic Energy Commission here from 1950 until 1953, and came to Y-12 October 19 of that year.

Reynolds is married to the former Bobbie King, and the couple has three children . . . Herbert Alan, and daughters Teresa and Patsy.

Herb is an ardent fisherman and plays softball in the summer, and bowls in the winter.

Guard, Reserve Officer Schools Are Announced

All National Guard and Reserve Officers interested in becoming educationally qualified for promotion by attending Army Reserve schools and at the same time earning retirement points are invited to attend an information meet and informal party. It will be held at the U.S. Army Reserve Armory on Fraternity Drive across the street from the William B. Stokely Athletic Center in Knoxville at 8 p.m., Monday, September 16.

Classes are scheduled for both Knoxville and Oak Ridge in Command and General Staff and in the Basic Officers' Course. More information may be obtained from T. F. Wagner, extension 3-4442.

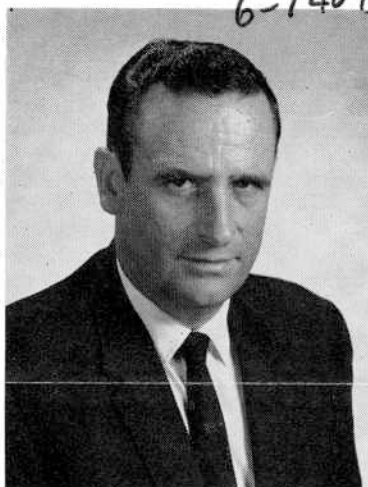
No Lifeguard On Duty At Clark Center Park

There is no lifeguard in the swimming area these days at the Clark Center Recreation Park.

Persons swimming in the lake do so, of course, at their own risk and extreme caution is recommended by both swimmers and boaters. Keep the Park a happy place, with no mishaps.



Oscar W. Patrick Sr.



Herbert Reynolds

AICHe Will Sponsor Special Business Seminar

A management symposium, of interest to scientists and engineers, has been set for September 17, 18, and 19. This symposium, sponsored by the Knoxville-Oak Ridge Section of the American Institute of Chemical Engineers, will deal with the general topic "Aspects of Investment Decisions and Performance Review." John Shacter, director of AECOP, will moderate the sessions, which will be conducted from 7 to 9 p.m.

The meetings will be held in the conference room of the ORAU Science Teacher Training Building, South Illinois Avenue, Oak Ridge. Attendance is not limited to AICHe members, and the registration fee for the symposium is \$3. Persons interested in attending should contact J. R. Merriam, extension 3-3658, for further information.

Subjects to be covered include: "Business and Government Objectives;" "Corporate Performance Criteria;" "Modern Approaches to Market Research and Development;" "Project Evaluation;" "Planning and Management of Innovation and New Ventures;" and "Internal Business or 'Profit Center' Performance Evaluation."

ALL IS WELL

We like to hear the baseball scores every morning. It's not that we're interested in who won the Topeka-Indianapolis game . . . it's just that as long as they're giving baseball scores on the radio, we know that the world isn't falling apart!

TAT Recruiting New Trainees

The Training and Technology Project at Oak Ridge is currently recruiting disadvantaged persons for its worker training class to begin October 7. For the past two years the Training and Technology Project has provided training in industrial skills and technical fields to unemployed and underemployed persons in Tennessee.

Preference will be given to those applicants who are unemployed or underemployed and who are either school dropouts, members of a minority, under 22, over 45, or handicapped.

The fall program will provide training in six occupational areas: mechanical engineering drafting, electronics, physical testing, welding, mechanical fabrication and operation, and machining. The length of training will depend upon the course selected and the individual trainee. The average time of training is expected to be seven to eight months.

Trainees may be eligible for allowances during the training period. No tuition or fees will be charged.

The Training and Technology Project is operated by Oak Ridge Associated Universities; Union Carbide Corporation, Nuclear Division; and the University of Tennessee, in cooperation with the Tennessee Department of Employment Security.

The project is supported by the U.S. Department of Labor and the U.S. Atomic Energy Commission, in cooperation with the U.S. Office of Education. Training is conducted at Y-12, which is operated by Union Carbide for the AEC.

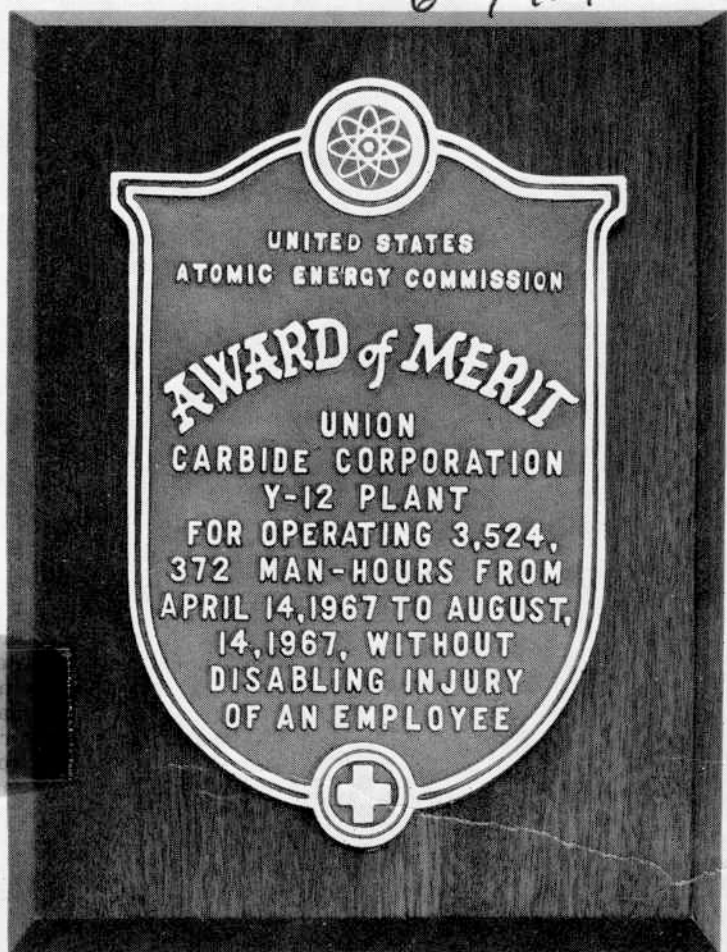
Persons who meet the requirements of being disadvantaged and who are interested in participating in the program should apply through their local office of the Tennessee Department of Employment Security.

Uniform Long Week-Ends Will Come In 1971

Uniform holidays will not take effect until January 1971. President Johnson recently signed a bill and stated, "The Monday holiday will stimulate greater industrial and commercial production, sparing business and labor the penalty of mid-week shut-downs." The changes are Washington's birthday—third Monday in February; Memorial Day—last Monday in May; Columbus Day—second Monday in October; and Veterans' Day—fourth Monday in October. Only the first two . . . Washington's birthday, and Memorial Day are official holidays for Y-12ers.

SAFETY SCOREBOARD

The Y-12 Plant Has
Operated
170 Days Or
5,112,000 Man-Hours
(Unofficial Estimate)
Through September 8
Without A Disabling Injury
SAFETY AT HOME,
AT WORK, AT PLAY



THE ATOMIC ENERGY COMMISSION'S Award of Merit was recently presented Y-12 for the 3,524,372 man-hours worked from April 14 through August 14 last year without a disabling injury. The year 1967 was the AEC's best record in history safety-wise and saw Y-12 improve its accident frequenting rating. This year is proving to be even better. As of midnight September 4, Y-12 officially passed the five million man-hours worked without a lost-time injury. The accompanying letter which came with the above plaque said in part: 'It is upon accomplishments such as this that the Commission relies for maintaining its leadership position in the field of industrial safety. The Y-12 Plant has a long record of meritorious safety achievements resulting in their having received numerous AEC safety awards.'

The Bulletin

Published Weekly For The
Y-12 Employees Of
UNION CARBIDE
CORPORATION



NUCLEAR DIVISION

JAMES A. YOUNG Editor

Member Appalachian
Industrial
Editor's
Association

American Association Industrial Editors

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Silver Son Takes Degree At U.T.



Glenn Silver

Glenn Silver, son of J. D. Silver, Research Services, received his BS degree in Mechanical Engineering at the August graduation exercises at the University of Tennessee. Glenn is a 1957 graduate of Oak Ridge High School. After completing four years of service with the U.S. Navy, Glenn returned to continue his education.

Glenn and his wife Shirley have moved to Chattanooga where the engineering graduate has accepted a position with the Tennessee Valley Authority.

Parking Lot Safety

Recent safety bulletins have emphasized the hazards faced by vehicle drivers on the plant access routes and pedestrians crossing the streets in the Plant. It is reasonable to assume that traffic safety will continue to be a pressing problem as plant activity increases. A summary of traffic conditions in the plant parking lots was recently made, and the most frequent violations are herein summarized.

The most frequent offense appears to be the wrong-way-traffic violation. Continued violation of established traffic flow patterns can only lead to incidents of personal injury, property damage, and employee inconvenience. Speeding is a serious violation and was observed to often be a compounding factor for other serious violations. As the degree of speeding increases, the potential for the seriousness of traffic accidents also increases. A number of employees were observed ignoring traffic signals and changing traffic lanes without proper signaling. Such flagrant violations by offensive drivers can only create situations that even the most defensive drivers find impossible to cope with.

Prevention of serious injury in the plant parking facilities, without strict and often severe enforcement, can only be accomplished by each employee actively and sincerely practicing concern-

TIMS Planning October Program

TIMS, The Institute of Management Science, in conjunction with the University of Tennessee is holding its Fourth Annual South-eastern Regional Meeting on the University campus October 24, 25. This institution is an international society formed in 1954 with the purpose of identifying, extending, and unifying scientific knowledge pertaining to management.

A highlight of the program will be a luncheon address on October 25, by Thomas R. May, president, Lockheed-Georgia Company. His subject will be "Air Transportation Development: A Service Industry." The introduction for the luncheon talk will be made by Dr. Andrew D. Holt, president of the University.

The remainder of the program has been structured to be of interest to as many people as possible in the area of management. Papers will be presented both on a technical and non-technical basis, thus allowing for a cross-fertilization of ideas between theoretical and non-theoretical type personnel. For example, one program session is devoted to recent advances in integer and non-linear programming from a theoretical point of view. Another portion of this program will be devoted to management science in business planning where papers concerning corporate risk analysis, year-end tax planning, capital budgeting, and order processing systems will be discussed. One entire session will be devoted to management with modern computing and data processing techniques. Another outstanding session will be devoted to the ideas of government planning where people from North Carolina state government will discuss techniques for long range state planning; concept and implementation.

It is the desire of the College of Business Administration and the University to sponsor and support conferences of this type and it is hoped that the program will be of benefit to the business man of Tennessee as well as the entire country.

Anyone desiring further information about the program may contact:

Dr. Robert A. McLean
Program Chairman
Statistics Department
The University of Tennessee
Knoxville, Tennessee 37916

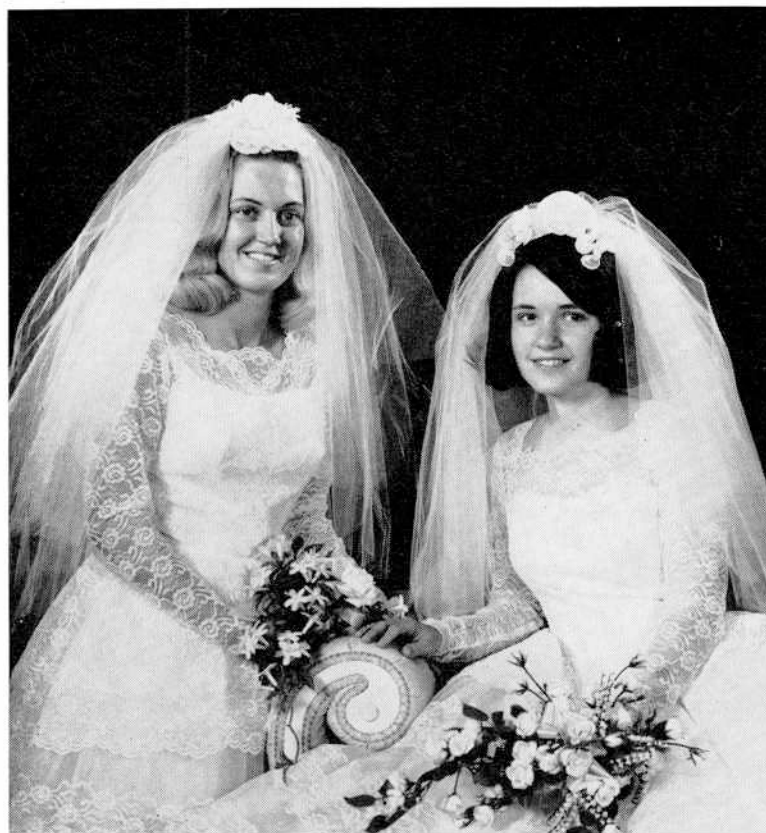


Ride wanted from the vicinity of Powell Airport, Powell, to East Portal, straight day. J. B. Brannum, plant phone 3-5095, home phone Powell 947-6113.

MISTAKEN IDENTITY

Nearly one in every four victims in big-game hunting accidents was wrongly identified as an animal by a fellow-hunter; another 13 percent were wounded because the hunter shot indiscriminately at anything that moved, reports the National Society for the Prevention of Blindness. Each year during the hunting season the society receives many reports of such accidents in which hunters are blinded, seriously wounded or even killed.

tration, control, and courtesy when driving.



Mrs. Robert R. Bentz and Mrs. Edwin D. Strang
(Misses Ramona Gaye and Rhonda Elaine Lively)



Misses Ramona Gaye Lively and Rhonda Elaine Lively were married August 18 in a double wedding ceremony at the Coalfield Seventh Day Adventist Church.

Ramona became the bride of A-1/c Robert R. Bentz, son of Mr. and Mrs. Frank Bentz, Parkersburg, West Virginia. Rhonda was wed to Mr. Edwin Dale Strang, son of Mr. and Mrs. Wilson T. Strang, Collegedale, Tennessee.

The brides are the daughters of Mr. and Mrs. Robert E. Lively, Coalfield. Mr. Lively is employed in Y-12's General Metal Fabrication Shop.

The brides were given in marriage by their father and chose similar dresses of Chantilly lace over satin. The bodices featured a scalloped neckline and full-length tapered sleeves. The skirts were tiers of lace trimmed with sequins. Their veils of illusion were held in place by organza flower petals and seed pearls. They carried bouquets of cushion mums centered with white orchids.

The brides' attendants wore floor length dresses of mint green and yellow stain. Mrs. Nancy Smith served as matron of honor; Misses Patsy Player, Sumter, South Carolina; Arlene Genton, Bradenton, Florida; Kay Johnson, Wilda Neal, cousins of the brides; and Alice Pullen, Rocky Mount, North Carolina.

Groom Bentz had Gary Jackson as his best man and ushers were Bobby Lively and Steve Johnson.

Attending Groomsman Strang were Danny Wiggins, best man, and Larry Johnson and Elwyn Smith, ushers.

Flower girls were Lisa Kay and Lori Ann Lively, sisters of the brides and a cousin, Anna Marie Langley.

The ceremony was performed by Elder J. R. Perkins, and music was furnished by Miss Gloria Patterson, pianist and Wilson Strang, vocalist.

The Bentzes are at home in

Whiteman AFB, Missouri, where Airman Bentz is stationed with the Strategic Air Command. They are both former students at Southern Missionary College. Mrs. Bentz is a graduate with a BS degree in biology.

The Strangs are at Collegedale, Tennessee, where they are students at Southern Missionary College.



Mr. and Mrs. David M. Lewis

LEWIS—GRIFFIN

David M. Lewis and his bride, the former Miss Rebecca Lynn Griffin, are at home at 264 Kaiulani Drive, Apartment number 14, Honolulu, Hawaii, where the groom is stationed with the U.S. Navy. He will return to Vietnam in November. The couple was married at Calvary Baptist Church, Oak Ridge, Saturday, July 20.

The bride is the daughter of the Reverend and Mrs. J. D. Griffin. Reverend Griffin is pastor of the Calvary Baptist Church and officiated at the rites with the Reverend Norman Beck, the bride's brother-in-law, assisting.

The groom is the son of Mr. and Mrs. Jesse A. Lewis, 123 Briar Road, Oak Ridge. The groom's father is in Y-12's Beta Two Shop.

Olympics Display For Commission At Mexico City

The Atomic Energy Commission will participate in the Olympics this fall. In preparation, the AEC is now installing in Mexico City a special exhibit, to be opened in mid-September through November 30, as part of the 29th Olympiad Cultural program.

The exhibit, called "A New Abundance of Energy," recently departed from the American Museum of Atomic Energy here on its long trek to the Mexico City site.

The exhibit will be on display at the Cultural Center of Mexico's National Polytechnical Institute along with exhibits from other nations. All will be devoted to the theme of nuclear energy as a contributor to the betterment of mankind.

The United States exhibit is the product of ideas and materials from AEC facilities in four widely separated areas — Tennessee, California, Nevada and Washington, D.C. The largest part of the exhibit was provided by AEC headquarters and by the Museum of Atomic Energy here, which is operated by Oak Ridge Associated Universities.

Occupying more than 4,000 square feet of floor area, the U.S. exhibit relates in lay-level fashion the many benefits already derived from nuclear science and some benefits predicted for the future.

In addition to panel displays which describe the basic principles of atomic energy, the exhibit also elaborates on a number of peaceful nuclear programs, including the growing use of nuclear power plants and the plans to use such plants for desalting water; the use of peaceful nuclear explosives to solve large engineering problems; the AEC's nuclear rocket program; the application of radioisotopes in medical diagnosis and treatment, improving foodstuffs, industrial processing and research, and the possibilities of using massive nuclear power plants in agro-industrial complexes to supply conventional power and water needs plus additional power for extraction of minerals and processing of other raw materials.

Kissing Wife May Be Safe Way To Start Day

Kissing your wife before leaving for work is a safety thing to do in more ways than one. Sir Edward Brown, Conservative Parliamentary Labor Committee, pointed out recently that it's not only good protection for the marriage, but makes for a safer worker. A man who has had a row with his wife is a potential hazard on the job, Sir Edward explained.



"Ed got tired of always being late to work."

Classic Bowlers Throw First Balls

Y-12's big Classic Bowling League made its 1968-69 debut last week, again 16-teams strong. Three teams posted four-point sweeps over opponents. The Eagles, rolling highs of the night, put the Screwballs down; the Pinbusters rolled past the Cubs; and the Playboys pinned back the Rebels.

Posting three points were the Swingsters over the All Stars, the Has Beens by the Tigers and the Markers over the Smelters.

The Bumpers-Splinters and Eightballs-Rippers matches were draws.

Bill Ladd, Swingsters, rolled a 224 scratch single game . . . Bill Smith, Eagles, had a 240 handicap game. Sewell Brown, Has Beens, totaled out with a 586 scratch series, 628 handicap count.

The Eagles' singles were 908 scratch, 1027 handicap . . . series of 2441, 2834.

League standings follow:

Team	W	L
Eagles	4	0
Pinbusters	4	0
Playboys	4	0
Swingsters	3	1
Has Beens	3	1
Markers	3	1
Bumpers	2	2
Splinters	2	2
Eightballs	2	2
Rippers	2	2
Smelters	1	3
Tigers	1	3
All Stars	1	3
Rebels	0	4
Cubs	0	4
Screwballs	0	4

Hiking Club Sponsors Informational Meets

The Smoky Mountain Hiking Club will sponsor two information meetings to assist people with a possible interest in hiking to get started either alone or with a group. These meetings are free to the public and will be conducted by experienced hikers. They should be of interest not only to leaders of Boy Scouts, Girl Scouts, YMCA, YWCA, and similar groups, but to individuals contemplating hiking as well.

The following topics will be discussed: road access, maps, trails and weather; clothing and footwear; common pack items and use; trail hazards and trail care; overnight packing, shelter use, cooking and sleeping equipment.

There will be a question and answer period, lists of equipment suppliers, and exhibits of equipment and catalogs from equipment suppliers.

The first meeting is set at Oak Ridge at the Unitarian Church, 1500 Oak Ridge Turnpike, from 10 to 12 a.m., Saturday, September 21. The second meeting is in Knoxville at the Senior Citizens Center, 611 Winona Street, N.E. (off Magnolia Avenue) from 7:30 to 9:30 p.m., Saturday, September 21.

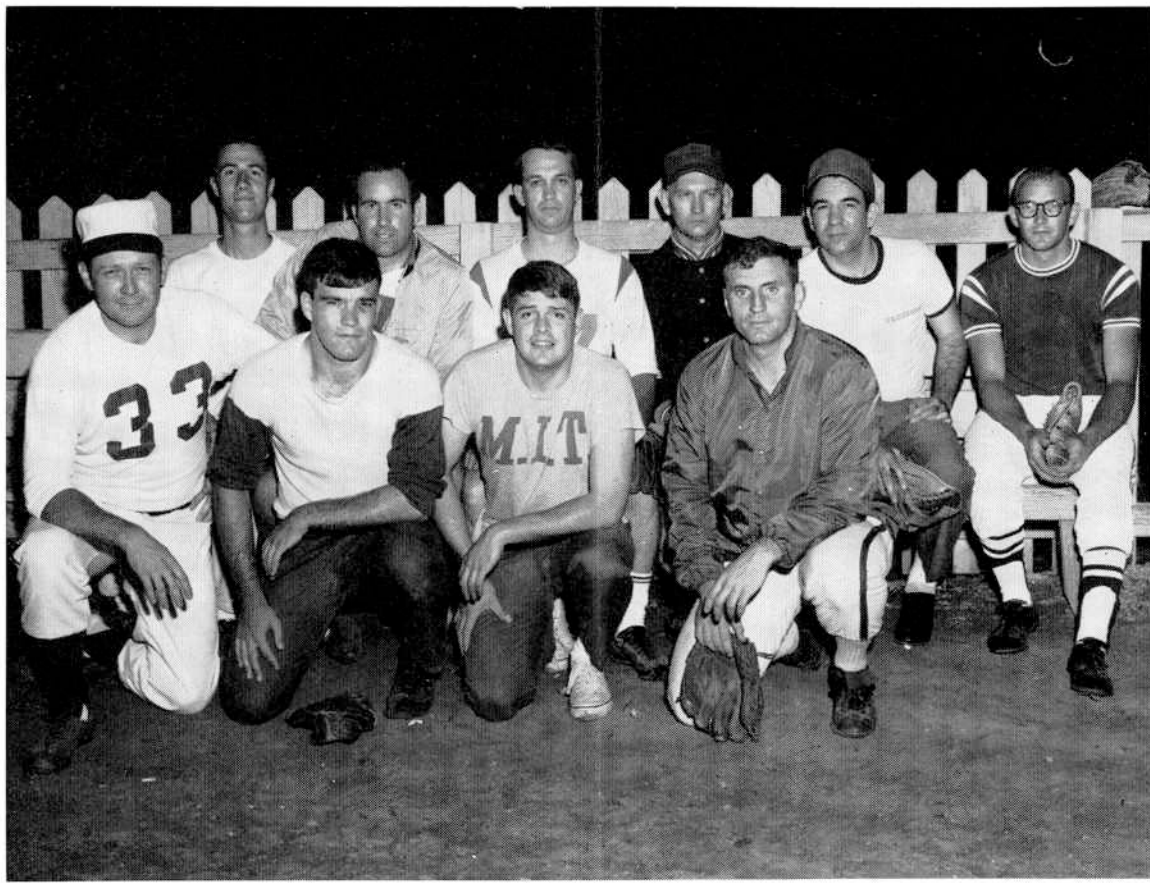
Free Boating Courses Offered To Ridgers

Free Boating Classes are again being offered by the Oak Ridge Power Squadron. The course will cover government regulations, rules of the road, seamanship, river piloting, compass and chart-work. Classes start September 19, 7:30 p.m., Room A-205, at the Oak Ridge High School.

Class Chairman is H. S. Corey, Y-12; Squadron Educational Officer, R. J. Wertz, K-25; and Squadron Commander, R. S. Edwards, X-10.

DEFINITION

An egotist is a man who thinks as much of himself as you think of yourself.



THE BIG BRAVES, WINNERS OF BOTH HALVES in the Slowpitch League, are seen above in all their glory. The Y-12 team is minus its master coach Bobby Hopkins in the photograph. Kneeling in the front row, from left, are John Evans, Larry McDonald, Fred Davenport and Jim Shoemaker. In the back row are Fred Wetzel, Rick Hull, Ray Riggs, Jim Carden, Ted Langford and Ted Hatcher.

Case-Miller Are Horseshoe Leaders

The Case-Miller team leads the Horseshoe League by eight points, with only one week remaining in action. They defeated the Eubanks-Raper team last week for the full count of nine . . . and the Durham-Bailey team also clipped the Young-Holsopple duo. Reed-Stephens took a forfeit win from Hutto-Tillery.

The Allmon-Moody team won eight points from Luckett-Brock.

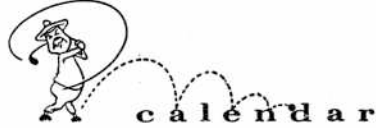
League standings follow:

Team	W	L
Case-Miller, ORNL	50	4
Durham-Bailey, ORNL	42	12
Reed-Stephens, Y-12	35	19
Allmon-Moody, ORNL	33	21
Eubanks-Raper, Y-12	32	22
Gray-Copeland, ORNL	21	24
Wyatt-Hensley, Y-12	19	26
Luckett-Brock, ORNL	18	36
Young-Holsopple, ORNL	9	45
Hutto-Tillery, ORNL	2	43

CROSSED EYES

Children do not "outgrow" crossed eyes, despite old-wives' tales to the contrary. To prevent possible loss of sight, crossed eyes should be treated before the child reaches four years of age, counsels the National Society for the Prevention of Blindness.

Recreation



Monday, September 16
BOWLING: C League, 5:45 p.m., Ark Lanes.

PHYSICAL FITNESS: (Women) 7:30 p.m., Oak Ridge High School Girls' Gym.

Tuesday, September 17
PHYSICAL FITNESS: (Men) 7:30 p.m., Oak Ridge High School Gym.

PISTOL LEAGUE, 6:15 p.m., Oak Ridge Sportsmen's Association.

Wednesday, September 18
BOWLING: Mixed League, 8 p.m., Ark Lanes.

Thursday, September 19
BOWLING: Classic League, 5:45 p.m., Ark Lanes.

NATURAL GAS

Natural gas liquefies when cooled to a temperature of 258 degrees below zero. As a liquid, 630 cubic feet of natural gas can be stored in just one cubic foot of space.



Mixed League Hits Alleys First!

The Mixed League, eight-team strong, was the first Y-12 team into the alleys last week, initiating their 28-week schedule.

The Twisters took the only big win of the night, downing the Rollers for four points. The Goofers got three points from the Mustangs, and the Alley Cats took the Hits & Misses by the same tune. The Roses 'N Thorns and McSprays shared two points each.

Charlie Gillihan, Rollers, rolled a 192 game for high singles of the night . . . J. J. Sewell, Alley Cats, posted a 486 scratch series.

Lou Sahr, Twisters, took a 182 single game . . . 509 scratch series.

(No handicap highs were figured for the first event.)

The Goofers gained high singles . . . 680 . . . and they tied with the Twisters for high scratch series . . . 1818.

League standings follow:

Team	W	L
Twisters	4	0
Goofers	3	1
Alley Cats	3	1
Roses 'N Thorns	2	2
McSprays	2	2
Hits & Misses	1	3
Mustangs	1	3
Rollers	0	4

VISION TESTS

The National Society for the Prevention of Blindness recommends a vision test requirement for all seeking hunting licenses to help reduce the number of hunting accidents.

Today is safety day.

Jim Pugh Again Pars Wallace Hills For Y-12 Honors

Jim Pugh won his second Y-12 golf tournament of the year Saturday . . . at Wallace Hills. Jim fired the same score Saturday that he tallied on June 22 . . . when Y-12ers first played the Blount County course. His 72 was again low, among the 122 duffers.

Following Jim in scratch counting were Bill Hamill and D. E. Littleton, each with 77; and W. F. Jones and George Heins, each with 79.

In handicap scoring it was Joe Raper and J. E. Bartholomew with 71; Emerson Henck, Jack Gresham and Jack Gamble with 72 apiece. Everett Rogers counted 13 pars; Red Leach 12.

SECOND FLIGHT

The second-seeded division was taken by Ray Riggs, scoring an 80; followed by Jerry Babb, 82; Charles Ferguson and Ed Sise, each with 84.

Handicap lows were carded by Dan Culberson, 69; Gordon Hill, 70; J. D. Ball, Sewell Brown and Ron Green, 74.

Virgil Lovett posted 10 pars; Hugh Nichols, nine.

Leader Riggs eagled the number eight hole . . . 475 yard, par five hole!

THIRD FLIGHT

Bill Akers' card was low in the third division, as he scored an 86. In scratch scoring after Akers were B. B. Stanton and C. J. Williams, 87; George Buxton, 89.

Handicap lows were recorded by Ed Fleischman, C. V. Taylor, Jim Bryson and Bernie D. McElroy.

E. K. Cottingham counted seven pars; Dan Morgan, Walt Simmons and G. R. Bentley totaled six.

FOURTH FLIGHT

Bob Rose posted honors in the fourth division, scoring a fine 89. He was followed by L. G. Bryson, 90; Earl C. Smith, 93; and Bill McManus, 94.

Handicap lows saw John Harris with laurels . . . scoring a 68 . . . followed by Dave Hendrickson, 73; Dick Spears, 74; and Fred Guttery, 77.

Don Ferree parred six holes; Curt Ridings, four.

Thus, Y-12ers rang down the curtain on the 1968 golf story. See you folks again next Spring!

Gymnastics Course Opens For Parents

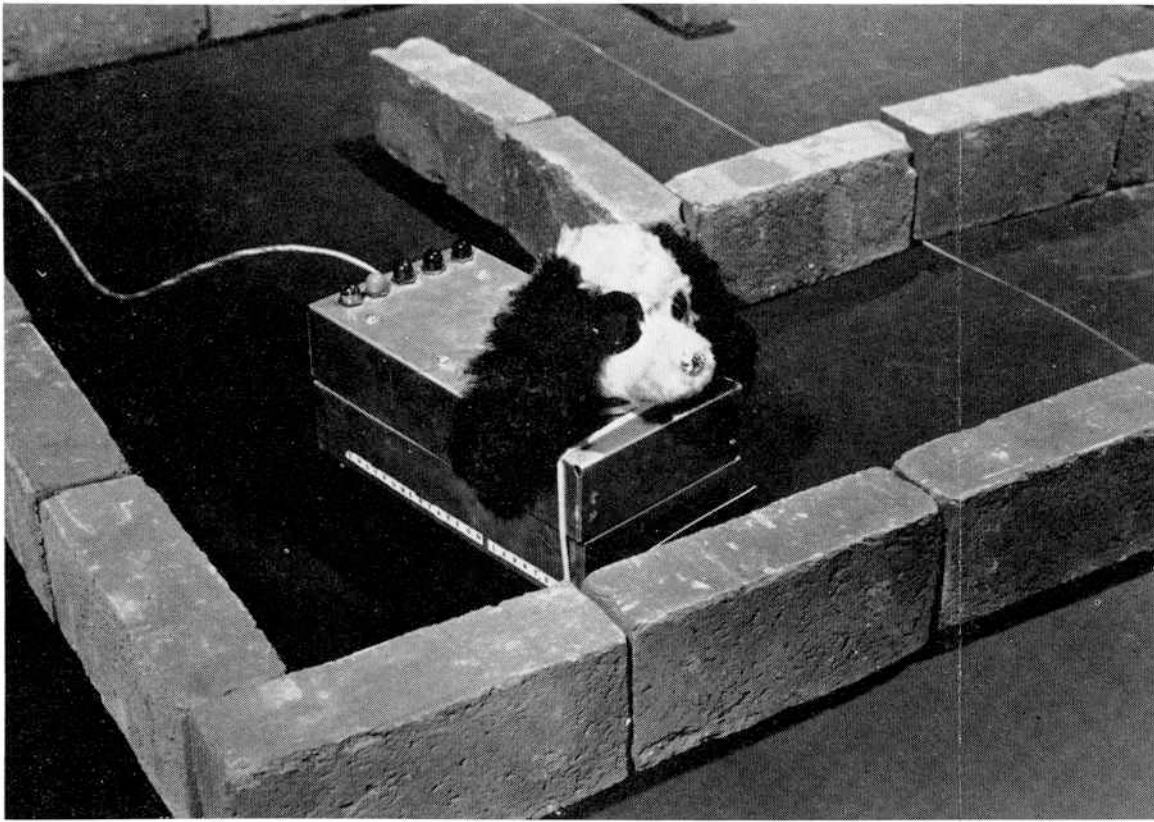
A course in elementary gymnastics is being offered to parents who would like to have their children join the Oak Ridge Gymnastics Club later in the year. The course is intended for parents who know little about gymnastics, but who would like to assist their children in learning the sport. Emphasis will be placed on the "spotting" (i.e., assistance and support given to the child) of the various gym stunts, and on the form and technique required by the child in the performance of these stunts.

The classes for parents began Monday, September 9 and will continue through September on each Monday and Thursday (at 7:30 p.m.). They will be held in the girls' gym (the round building), 2nd floor, of the Oak Ridge High School. It is suggested that gym clothing and gym shoes be worn, because the parents will be allowed to attempt the stunts they might subsequently teach. These classes are free.

Further details may be obtained from Mrs. James Liafsha, Oak Ridge telephone 483-7989, or Hugo Bertini, 483-8785.



ANN TODD KING AND JENNIFER LUND are two of the cheerleaders for the Oak Ridge Wildcats this year. Ann is the daughter of C. R. King, Employment; and Jennifer is the daughter of John R. Lund, ORNL.



HIS NAME IS 'OLD YALLER.' A dog-robot, its aluminum walled body packed with sensory equipment and linked to a computer, learns to adapt to its environment as it makes its way through a maze. Developed by computer scientist Richard Warren at the Massachusetts Institute of Technology, "Old Yaller" is one of a broad range of robots which will be demonstrated on "The 21st Century" third-season premiere episode, "Weird World of Robots," Sunday, September 15, at 6 p.m., EDT, in color on the CBS Television Network. The program is carried locally by WBIR-TV, Channel 10. CBS News Correspondent Walter Cronkite is principal reporter for the weekly half-hour broadcasts, sponsored in the public interest by Union Carbide Corporation.



September sings her sweet song to the tune of School Days, and Happy Anniversaries to several Y-12ers, marking important dates with Union Carbide Corporation. Congratulations.

25 YEARS

Albert M. Jones, Chemical Services, September 13.

Frederick A. Ruckart, Guard Department, September 13.

John H. Rohland, Materials and Services Administration, September 14.

Kenrith M. Adkins, General Expediting and Auxiliary Services, September 15.

20 YEARS

Desma H. Blair, Process Maintenance, September 13.

Hosie Simmons, Process Maintenance, September 13.

Arthur A. Gardner, Graphite Shop, September 17.

15 YEARS

David R. Allison, Dimensional Inspection, September 11.

Wayne W. Kirksey, Production Analysis, September 11.

James A. Andrews, Buildings, Grounds and Maintenance Shops, September 14.

George R. Beasley, Utilities Administration, September 14.

Lacie W. Blevins, Metallurgical Development, September 14.

Earl T. Henry, Dimensional Inspection, September 14.

William R. Hicks, Physical Inspection, September 14.

John L. Vasey Jr., Mechanical Inspection, September 14.

Coy Crutchfield, Physical Testing, September 15.

Reed D. Atkins, Dispatching Department, September 16.

Eulysses Smith, Alpha Five Processing, September 17.

William W. Smith, Research Services, September 17.

NO DIFFICULTY

It is not difficult to meet expenses these days. As a matter of fact, you meet them every time you turn around.

Weird World Of Robots Is Premier 21st Century Telecast For Sunday

"Robots for rent: \$2.70 per hour (less after the first 1,500-hour shift)."

This is not a science fiction projection but the cost for leasing a robot today. True, it is limited primarily to industry, but man's fascination with robots has reached the stage where the above offering is being made.

The role that robots are playing now and will play in the life of twenty-first century man will be reported in "The Weird World of Robots" — the season's premiere episode of "The 21st Century," on the CBS Television Network, Sunday, September 15, at 6 p.m., EDT. The program is carried by Knoxville TV station WBIR-TV, Channel 10.

CBS News Correspondent Walter Cronkite is principal reporter for the award-winning series which will be sponsored in the public interest for the third successive television season by Union Carbide Corporation.

"There may be virtually no task beyond the skills of the twenty-first century robot," Cronkite reports.

"Just how close man and machine may come is an open question," he notes.

Among the varied models which will be shown that are off the drawing boards and on their "feet" for a number of research programs and jobs are:

- **Versatran**, a type of industrial robot that today performs tasks which man himself cannot do. Installed in a Union Carbide plant in Indianapolis, Versatran operates a detonation gun developed by Carbide, which fires a super hard coating onto jet engine parts in the only process of its kind. Called "flame plating," it is carried out under severe conditions of heat and noise.

- **"Old Yaller,"** an aluminum-walled box packed with computer-linked sensory equipment, so named because it is topped by a toy dog's head.

The dog-robot "learns" to adapt

to its environment as it makes its way through a maze. He could be the forerunner of a robot astronaut.

As different as the two might seem to be, these two robots are examples of just one of the two basic forms of robots being developed: Versatran and "Old Yaller" are the "simulators." These robots mimic human performance in narrow proscribed areas. The second type is the "augmenter," which is designed to extend man's physical capabilities.

A dramatic example of this type is the **Mobot**, an 8,000 pound bruiser muscled with a pair of six-foot arms capable of performing tasks in environments hostile to man.

The essential difference between the two is that the simulators such as "Old Yaller" need some form of rudimentary brain or programming to perform. Augmentors, on the other hand, use man's brain and nervous system and merely magnify his muscle power or other physical attributes.

Subsequent subjects to be reported during the coming season on "The 21st Century," will be weather control and modification, feeding the emerging nations, science fiction, new optical tools for medical diagnosis and greater understanding of how the human body works, and space survival.

"The Weird World of Robots" was written by Fred Warshofsky, science editor. Isaac Kleinerman is producer of the prize-winning series and Burton Benjamin executive producer.

"The Weird World of Robots," Sunday, 6 p.m., EDT, WBIR-TV, Channel 10.

FIELD OF VISION

Astigmatism, reduced field of vision, farsightedness, nearsightedness and color blindness all affect visual acuity, and many hunters have these vision defects without knowing it, warns the National Society for the Prevention of Blindness.



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Power Squadron Hosts Big Meet

The Oak Ridge Power Squadron will be host squadron on September 13, 14 to all of the squadrons in District 17 of the United States Power Squadrons. The National Chief Commander Emery Ellis, Youngstown, Ohio, and a member of the Ashtabula squadron together with Rear Cmdr. John Wilde, Massena, New York, who is currently chairman of the National Piloting Committee, will be attending the meetings, set at the Holiday Inn, Oak Ridge.

It was 21 years ago that Admiral Hyman Rickover (then Captain) presented the Oak Ridge squadron with its charter. Of the original charter members present at the meeting, only William C. Tunnell, past commander of the local squadron, is still employed in the Nuclear Division. At the present Randall Edwards is commander of the local squadron and Harry Corey is lieutenant commander. Gus Angele is district educational officer and holds the most merit marks (21) of any member of the Oak Ridge Power Squadron. George Banic is the next highest with 20 merit marks.

Emery N. Ellis, has spent the last 15 years in furthering the aims and principles of the N.S.-P.S. at all levels of organization. He became a member in 1953 and immediately went to work to earn his 15 merit marks. He took courses in seamanship, advanced piloting, junior navigation, and instructor training, as well as a stint as a teacher in piloting.

Squadrons to be represented at the conference this week include Asheville, North Carolina; Atlanta, Rome and Lake Lanier, Georgia; Kingsport, Knoxville, Johnson City and Oak Ridge, Tennessee; and Huntsville, Alabama. A new squadron will be presented its charter by C/C Ellis, to be known as the Vulcan Squadron and is located in Birmingham, Alabama.

In the 21 years of the Oak Ridge squadron, this is the second time that it has had the national chief commander attend a district conference here. Cmdr. Ellis was elevated to the post of chief commander at the meeting in Miami in January. R/C John Wilde has been a member of the U.S.P.S. since 1925 and has served as a line officer for four and one-half years in the U.S. Navy. He presently holds the grade of commander in the U.S. Naval Reserve.

EXPENSIVE SILENCE

The Los Angeles city legislature has enacted a tax in the cause of silence. Under the ruling, each departing and arriving passenger at LA's International Airport would be taxed \$1, the proceeds to be used for soundproofing homes, schools and churches in the airport community.

FAIR DAYS AHEAD

It might be said about her that she had a schoolgirl complexion . . . then it cleared up.



Cmdr. Emery Ellis

Peracetic Acid Start-Up At Taft

Union Carbide Corporation recently announced the start-up of the peracetic acid and derivatives complex at the corporation's \$200-million plant now under construction at Taft, Louisiana. Construction work on other areas of the Taft plant continues.

The new complex will manufacture over 20 peracetic acid derivatives for the plastics, textile, electronic, adhesives and other industries. Union Carbide officials foresee an increasing usefulness for peracetic acid and derivatives in the development of new markets.

The complex includes units that will be capable of producing annually 120 million pounds of peracetic acid, 200 million pounds of derivatives, 80 million pounds of cyclohexanone, and 50 million pounds of caprolactam. These units are fully automated and include many technological advances developed by the corporation during the eight years it operated a 15-million-pound-per-year commercial peracetic plant at Institute, West Virginia. Union Carbide makes peracetic acid by a patented process based on acetaldehyde.

Peracetic acid made at Taft will be used primarily to make derivatives. The most important derivatives to be produced at the complex include epoxy plasticizers for vinyl plastics, caprolactone for the manufacture of urethane elastomers and polymeric plasticizers, cycloaliphatic epoxides for epoxy resins and coatings, cyclohexanone for use as a chemical intermediate and coatings solvent, and caprolactam for sale to manufacturers of nylon 6. In addition, Union Carbide considers custom epoxidations based on peracetic acid an important market opportunity and will promote this capability widely within the chemical industry. Major markets for these products are expected to develop within a short time.

LAST RESORT

'Men and nations do behave wisely, once all other alternatives have been exhausted.' — Abba Eban.